



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,859	02/20/2004	Amiko Shimizubata	051626-5009	1644
9629	7590	09/02/2005	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			WALSH, RYAN D	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 09/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

8/1

<b>Office Action Summary</b>	<b>Application No.</b> 10/781,859	<b>Applicant(s)</b> SHIMIZUBATA, AMIKO	
	<b>Examiner</b> Ryan D. Walsh	<b>Art Unit</b> 2852	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) ☒ All    b) ☐ Some    \* c) ☐ None of:
    - 1. ☒ Certified copies of the priority documents have been received.
    - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2-20-2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 1-16 are objected to because of the following informalities: The term "slip" is used throughout the pending claims. This term is broad and unclear, and for examining purposes, the examiner will interpret the claim as a "printed portion on a recording material" (i.e. toner portion printed on paper). Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-4, 6-9, 11-12, and 14-16 rejected under 35 U.S.C. 102(b) as being anticipated by Sugisaki et al (US Pat. # 5,548,390).

Regarding claims 1 and 9, Sugisaki et al. teach, "A double-sided printing apparatus which prints slips on both sides of an elongated sheet having page breaks while transporting the sheet, and which is provided with a first printer (11) for printing a slip on the obverse of the sheet and a second printer (12) disposed downstream of a sheet transportation path for printing a slip on the reverse of the sheet, the double-sided printing apparatus comprising: a first printing control unit (11a) which, upon receiving printing data including page-number information for each of slips, allows the first printer

Art Unit: 2852

to print one slip per page or sequentially print a plurality of slips per page (Col. 6, Ln. 58-60) on the obverse of the sheet according to sizes of slips, by selecting printing data for printing a slip on the obverse of the sheet out of the printing data received from a printing data transmitter (13), and also allows the first printer to print a mark representing a page-number (Col. 28, Ln. 58) of the slip to be printed on the obverse of the sheet in a position thereof, wherein the second printer includes a mark reading sensor (31) for reading the mark printed by the first printer, and wherein the double-sided printing apparatus further comprises a second printing control unit (12a) which, upon receiving, from the first printing control unit, printing data including page-number information for printing a slip (Col. 6, Ln. 58-60) on the reverse of one page of the sheet as well as size information of a slip to be printed on the obverse of the same page (Col. 28, Ln. 32-41), generates a reading timing signal for the mark reading sensor to read the mark, and compares page-number information (Col. 29, Ln. 16-67, Col. 30, Ln. 1-9, and Fig. 29-30) obtained by reading the mark printed on the obverse of the one page of the sheet by using the mark reading sensor with page-number information included in the printing data for printing the slip on the reverse received from the first printing control unit, so as to allow the second printer to print, on the reverse of the one page of the sheet, a slip having a page-number following the page-number of the slip which has been printed on the obverse of the same page (Col. 29, Ln. 8-15)."

Regarding claims 3 and 11, Sugisaki et al. teach, "further comprising a sheet reversing device (14) which is interposed between the first printer and the second printer

on the sheet transportation path (Fig. 4, Ref. Character CF) and which turns over the sheet being transported.”

Regarding claims 4 and 12, Sugisaki et al. teach, “wherein each of the first printer and the second printer forms an electrostatic latent image and forms a toner image by developing the electrostatic latent image with a toner, so as to form a slip image on the sheet by transferring and fixing the toner image on the sheet (Col. 11, Ln. 49-69 and Col. 12, Ln. 1-60).”

Regarding claims 6 and 14, Sugisaki et al. teach, “wherein the first printer is adapted to print a bar code as the mark (Col. 28, Ln. 58).”

Regarding claims 7 and 15, Sugisaki et al. teach, “further comprising an operating member which accepts input of the length per page of the elongated sheet (Col. 11, Ln. 2), wherein the first printing control unit selects the printing data for printing the slip on the obverse of the sheet based on the length of the page which has been input through the operator (Col. 11, Ln. 5-16).”

Regarding claims 8 and 16, Sugisaki et al. teach, “further comprising a transportation path on which the sheet is transported from the first printer to the second printer while keeping the obverse and reverse of the sheet facing in predetermined respective directions, and wherein the second printer is adapted to print the slip on the reverse of the sheet while keeping the obverse and reverse of the sheet facing in the predetermined respective directions (Col. 12, Ln. 64-67 and Col. 13, Ln. 1-6).”

Regarding method claims 9, 11-12, and 14-16, Sugisaki et al. teach every step of these claims, in accordance with the rejections of claims 1, 2-4, and 6-8 above.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-10 and 5-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Sugisaki et al (US Pat. # 5,548,390) and Miyazaki (US Pat. # 6,674,456).

Regarding claim 2, Sugisaki et al. do not teach, "based on a result of a comparison between the page-number information obtained by reading the mark printed on the obverse of the one page of the sheet by using the mark reading sensor and the page-number information included in the printing data received from the first printing control unit, the second printing control unit instructs the second printer to print on the reverse of the one page of the sheet a slip having the page-number following that of the slip printed on the obverse of the same page, otherwise, the second printing control unit sends an error notice to the first printing control unit without instructing the second printer to perform any printing, and wherein the first printing control unit determines whether or not the error notice is received, and instructs the first printer to start printing of a slip on the obverse of the next page of the sheet when no error notice is received." However, the above claim is routine in the art as shown by Miyazaki et al. (See Col. 5, Ln. 22-51). It would have been obvious at the time the invention was made, to modify Sugisaki et al. to include based on a result of a comparison between the page-number information obtained by reading the mark printed on the obverse of the one page of the

sheet by using the mark reading sensor and the page-number information included in the printing data received from the first printing control unit, the second printing control unit instructs the second printer to print on the reverse of the one page of the sheet a slip having the page-number following that of the slip printed on the obverse of the same page, otherwise, the second printing control unit sends an error notice to the first printing control unit without instructing the second printer to perform any printing, and wherein the first printing control unit determines whether or not the error notice is received, and instructs the first printer to start printing of a slip on the obverse of the next page of the sheet when no error notice is received.

The ordinary artisan would have been motivated to modify Sugisaki et al. in a manner described above for at least the purpose of eliminating the use of toner, when printing is only used on one side of a page (i.e. eliminating waste).

Regarding claim 5, Sugisaki et al. teach, "wherein each of the first printer (11) and the second printer (12)," but do not teach "is a printer of an ink jet system." However being a printer of an ink jet system is routine in the art as shown by Miyazaki (See Col. 7, Ln. 46-51). It would have been obvious at the time the invention was made, to modify Sugisaki et al. to include an ink jet printing system.

The ordinary artisan would have been motivated to modify Sugisaki et al. in a manner described above for at least the purpose of using different printing technologies to produce various image reproduction qualities.

Regarding method claims 10 and 13, the combination of Sugisaki et al. and Miyazaki, teach every step of these claims, in accordance with the rejections of claims 2 and 5 above.

***Conclusion***

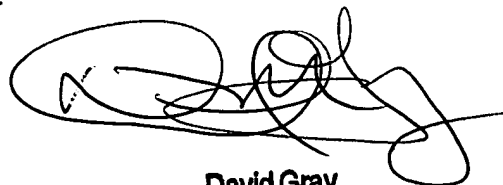
Materials cited by the examiner as prior art include, Landa et al. (US Pat. # 6,438,352) and Böck et al. (US Pat. # 6,381,440).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan D. Walsh whose telephone number is 571-272-2726. The examiner can normally be reached on M-F 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray can be reached on 571-272-2119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan D. Walsh  
Patent Examiner  
Art Unit 2852

A handwritten signature in black ink, appearing to read 'David Gray', with a large, stylized flourish extending from the end of the signature.

David Gray  
Primary Examiner



